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SCHOOLS OF PUBLIC HEALTH

EDUCATIONAL DATA REPORT

1982-83

by

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in cooperation with

THE DEANS OF THE SCHOOLS OF PUBLIC HEALTH

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PREFACE

Schools of Public Health have been educating professionals in the techniques of health preservation and disease prevention and control since the first decades of the twentieth century. Some Schools of Public Health had their beginnings in university schools of medicine; others were conceived from the outset as autonomous units within their parent institutions. Today there are twenty-three accredited Schools of Public Health in the United States, at eight private and fifteen public universities.*

Unlike other health professional schools which emphasize a specific clinical discipline (for example, medicine, nursing or dentistry), Schools of Public Health educate a wide range of professionals, from biostatisticians and epidemiologists to health administrators, community health educators, and specialists in areas such as environmental and occupational health, mental health, population studies, international health and the behavioral and social sciences.

The Schools have a combined enrollment of about 9,000 students and a faculty in excess of 1,700 Graduate education in each of the 23 Schools is organized around nine major specialties:

- Biostatistics
- Epidemiology
- Health Services Administration
- Public Health Practice and Program Management
- Health Education
- Environmental Sciences
- Occupational Safety and Health
- Nutrition
- Biomedical and Laboratory Sciences

Graduates of the Schools of Public Health work primarily in the fields of health promotion and disease prevention. They represent the basic resource pool from which federal, state and local health and environmental agencies draw their manpower needs. Graduates also work and teach in university settings. Industry relies heavily on the Schools to train employees involved in industrial hygiene, occupational safety and health, environmental toxicology, and other areas.

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*University of Alabama in Birmingham, Boston University, University of California-Berkeley, University of California-Los Angeles, Columbia University, Harvard University, University of Hawaii, University of Illinois, The Johns Hopkins University, University of Loma Linda, University of Massachusetts, University of Michigan, University of Minnesota, University of North Carolina, University of Oklahoma, University of Pittsburgh, University of Puerto Rico, San Diego State University, University of South Carolina, University of Texas, Tulane University, University of Washington and Yale University.

The Association of Schools of Public Health (ASPH)* operates a Data Center that collects and compiles aggregate data on applicants, students, graduates, faculty, educational costs and programs in each School of Public Health. The data collected serves the Schools and various federal, state and local agencies and private institutions in planning and implementing their respective public health training, research and service activities. ASPH has also developed the capacity to provide timely information on the status of the Schools of Public Health and the contribution of its students, faculty and graduates.

This report presents data collected by the ASPH staff for the 1982-83 school year. This report is designed to assist the Deans, staff and faculty in their efforts to develop and maintain relevant academic public health educational programs. This report also provides information that contributes to an understanding of each School's resources which, in turn, will guide the direction and substance of their graduate public health education, training and research endeavors.

The ASPH Data Committee hopes that the information contained in this report proves useful in providing the Deans with data needed to respond to emerging needs and to offer a balanced curriculum in public health, disease prevention and health promotion.

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*The Association of Schools of Public Health (ASPH) is the only national organization representing the Deans, faculty and students of the 23 Schools of Public Health. The Schools represent the primary education system that trains personnel needed to operate our nation's public health, disease prevention and health promotion programs. ASPH's principal purpose is to promote and improve the education and training of professional public health personnel. ASPH represents all the Schools of Public Health in the United States.

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APPLICANTS

There were 9,973 applications reported by 22 schools for Fall 1982 (San Diego is not included). Table 1 shows the trends in total applications since the early 1960s. Since not all schools reported each year, data for 17 schools that reported consistently is included for verification. Applications have been decreasing since 1978-79; in 1982 there was a 16% decrease among the 17 schools.

Table 2 shows the trends in applications/acceptances/enrollments. Again, ASPH data is for 17 schools with complete information. The percent accepted increased significantly in 1982-83--60% vs. 50% in 1981-82.

Table 3 shows Fall 1982 applications/acceptances/enrollments by group. Only 19 schools had complete data for all three categories; some schools do not solicit information on ethnicity from applicants. The acceptance rates for males and females were the same--59%--and the acceptance rate for foreign students was 53%.

There were significant differences in the acceptance rates based on ethnic group, ranging from 40% for black applicants to 65% for white applicants. Differences in acceptance rates based on sex were significant among minority applicants, but not among white applicants. For American Indian/Alaskan native applicants, 52% of the male and 46% of the female applicants were accepted; 67% of the male Asian/Hawaiian applicants were accepted vs. 57% of the female applicants; 45% of the male black applicants were accepted vs. 37% of the females. For Hispanic applicants, 46% of the male and 43% of the female applicants were accepted; however, if Puerto Rico is excluded, the figures are different--47% of the male and 52% of the female applicants were accepted. For white applicants, 64% of the male and 65% of the females were accepted. For foreign applicants, the acceptance rate (53%) was the same for males and females.

As always when viewing data on applicants, it must be remembered that the data refers to applications rather than individuals. There is currently no method of determining the average number of applications submitted per applicant, nor is there a means of determining whether there have been differences in this average over time or among population groups. If there have been significant differences in the average number of applications over time, then assumptions made about applicant trends could be faulty. Similarly, if there are significant differences in the average number of applications among various population groups, then assumptions made about these groups could also be erroneous. Therefore, the data on applicants must be viewed with caution.

Table 1

Trends in Total Applications

Year	No. of Schools	Applications	No. of Schools[1]	Applications	% Change
1961-62	14	2,274			
1965-66	15	4,026			
1969-70	18	5,999			
1974-75	19	9,916	17	8,708	
1976-77	19	12,292	17	11,443	+ 31%
1978-79	20[2]	13,000	17	12,043	+ 5%
1980-81	20[3]	11,898	17	11,457	- 5%
1981-82	21[3]	11,078	17	10,369	- 10%
1982-83	22[4]	9,973	17	8,700	- 16%

[1]For the ASPH Data (1974 on), not all member schools reported for all years. Data for 17 schools that reported each year is given for verification. Data for 1960s from Dr. James Troupin includes 2 Canadian schools.

[2]Puerto Rico not included.

[3]Minnesota not included.

[4]San Diego not included.

Table 2

Trends in Applications/Acceptances/Enrollments*

Year	No. of Schools	Number of applications	Number accepted	Percent accepted	New Enrollments	As % of Acceptances	As % of Applications
1961-62	14	2,274	1,465	64.4	-	-	-
1965-66	15	4,026	2,543	63.2	1,797	70.7	44.6
1967-68	17	4,709	2,682	57.0	1,947	72.6	41.3
1969-70	18	5,999	3,321	55.4	2,317	69.8	38.6
1974-75	17	8,708	-	-	2,715	-	31.2
1976-77	17	11,443	-	-	3,051	-	26.7
1978-79	17	12,043	-	-	3,391	-	28.2
1981-82	17	10,369	5,217	50.3	-	-	-
1982-83	17	8,700	5,243	60.3	2,852	54.4	32.8

* ASPH data (1974-1982) for 17 schools with data for years included. 1960s data from Dr. James Troupin includes 2 Canadian schools.

Table 3

Fall 1982 Applicants/Acceptances/Enrollments by Category

		Applications			New Enrollments		
	No. of Schools	No. Made	No. Accepted	% Accepted	No.	As % of Acceptances	As % of Applications
Males	22	4,210	2,465	59%	1,352	55%	32%
Females	22	5,621	3,338	59%	1,937	58%	35%
US Citizens	21	7,897	4,677	59%	2,686	57%	34%
Foreign Citizens	21	1,712	909	53%	454	50%	27%
Race (US only)							
American Ind/AN	19	60	29	48%	24	83%	40%
Asian/Hawaiian	19	350	215	61%	124	58%	35%
Black	19	624	250	40%	145	58%	23%
Hispanic	19	471	210	45%	167	80%	36%
Hispanic (excl. P. Rico)	(18)	(184)	(91)	(50%)	(60)	(66%)	33%
Total Minority	19	1,505	704	47%	460	65%	31%
White	19	4,774	3,086	65%	1,735	56%	36%
Total	22	9,973	5,847	59%	3,290	56%	33%

NEW ENROLLMENTS

There were 3,338* new students enrolled in 22 schools in the Fall of 1982 (San Diego is not included). This is the lowest recorded figure for new enrollments since 1976 when there were 3,317 new students in 19 schools.

The new enrollments are listed below by sex, race and citizenship. Almost 16% of the new students are foreign citizens, a significant increase over previous years. Over 59% are female (almost 63% for U.S. students), and over 20% of the U.S. students are members of minority groups.

	Male	Female	Unknown	Total
American Ind./Alas. Nat.	8	16		24
Asian/Hawaiian	57	74		131
Black	64	100		164
Hispanic	65	114		179
White	733	1,210		1,943
Unknown	118	256	1	375
Total U.S.	1,045	1,770	1	2,816
Foreign	317	202		519
Cit. Unknown	1	2		3
Total	1,363	1,974	1	3,338*

*The new enrollment total differs from the total in Table 3 due to the inculsion of 48 non-degree students who did not go through the application process.

STUDENTS

Enrollment

There were 8,896 students enrolled in the 23 schools in the Fall of 1982. Table 4 lists total enrollments for each school since 1974. Enrollment figures are also provided for 17 schools that reported consistently each year. In 1981, enrollment for the 17 schools declined by about 4%. Overall enrollment (22 schools) increased, due primarily to the addition of a new school (Boston) and the inclusion of off-campus students (Loma Linda) who were not counted in previous years.

Total enrollment for Fall 1982 was at the same level as the previous year, despite the addition of a new school. (For the 17 schools, enrollment decreased about 2%). Thirteen schools reported fewer students in 1982; decreases ranged from 2-24%. Public schools suffered the greatest decrease--10 of the 14 schools had fewer students, for an overall decrease of about 5%. Of the private schools, 3 of 8 had fewer students in 1982, and total enrollment in private schools increased by about 3%.

It should be noted that until 1982, several schools included undergraduate students in their enrollment figures, so a small portion of the decline in 1982 could be due to the omission of these students. The number of undergraduate students has always been quite small (generally under 100). In any event, enrollment figures are never exact, due to such factors as drop-outs, the reporting of Fall semester students only, and reporting variations among schools. However, enrollment data is believed to be generally accurate, and it seems clear that since 1980 enrollment in the schools has at least stabilized, if not actually declined.

Student Characteristics

Summary data for Fall 1982 students is presented below. Percentages have been calculated without the "unknown" categories.

Sex				
Male	3,794		42.7%	
Female	5,101		57.3%	
Unknown	1		--	
	8,896		100.0%	
Citizenship				
U.S.	7,615		86.5%	
Foreign	1,190		13.5%	
Unknown	91		--	
	8,896		100.0%	
Race (U.S. Students)				
American Indian/ Alaskan Native	70		1.0%	
Asian/Hawaiian	368		5.3%	
Black	403		5.8%	
Hispanic	359	(176)*	5.1%	(2.6)*
White	5,805		82.8%	
Unknown	610		--	
	7,615		100.0%	

*Hispanic students excluding Puerto Rico

Full-time/Part-time Status

Full-time	5,948	66.9%
Part-time	2,948	33.1%
	8,896	100.0%

Age

Under 25	1,081	14.4%
25 - 29	2,456	32.6%
30 - 34	2,056	27.3%
35 - 39	968	12.9%
40 - 44	497	6.6%
45 - 49	256	3.4%
50 and over	210	2.8%
Unknown	1,372	--
	8,896	100.0%

Area of Specialization

Biostatistics	559	6.4%
Epidemiology	1,070	12.2%
Health Services Administration	2,107	24.0%
Public Health Practice	644.5	7.3%
Health Education	590.5	6.7%
Environmental Sciences	1,121.5	12.8%
Occupational Safety & Health	313.5	3.6%
Nutrition	373	4.3%

Area of Specialization - Continued

Biomedical and Lab Sciences	348	4.0%
Other	859	9.8%
No Special-ization	783	8.9%
Unknown	127	--
	8,896	100.0%

Highest Previous Degree

Bachelor or Equiv.	3,757	60.3%
MPH	314	5.0%
Otner Master's	1,097	17.6%
MD/MBBS	727	11.7%
DDS/DMD	64	1.0%
DVM	30	0.5%
PhD	141	2.3%
Other Doctorate	47	0.8%
Other	51	0.8%
Unknown	2,668	--
	8,896	100.0%

Degree Objective

MPH	4,293	48.3%
MS/SM	758	8.5%
MSPH	594	6.7%
Other Master's	609	6.8%
DrPH	549	6.2%

Degree Objective - Continued

PhD	978	11.0%
ScD/DSc	269	3.0%
Other Doct.	19	0.2%
MD/MPH	69	0.8%
Non-degree	735	8.3%
Other	17	0.2%
Unknown	6	--
	8,896	100.0%

Trends in Student Characteristics (see Table 5)

The proportion of female students has continued to increase, from 46% in 1974 to 57% in 1982. Among U.S. students, females constitute almost 61% of the total.

In the last two years, the number of foreign students has increased rather dramatically--about 1,300 in 1981 and 1,190 in 1982. From 1974 through 1980, the number of foreign students increased slowly, from about 600 to 800 students. However, it should be noted that during the 1960's the proportion of foreign students was higher--about 20-23%--so the increase in foreign enrollments is not a completely new trend.

Of the 1982 U.S. students, 1,200 (17%) are members of minority groups. Minority students have generally represented between 17% and 18% of the U.S. students since 1974. The quality of the data is not uniform for the nine-year period, so minor fluctuations from year to year cannot be assumed to be significant. It appears that the proportion of minority students decreased in 1981, but rose again in 1982. As noted previously, minority students constitute over 20% of new enrollments among U.S. students.

The estimated median age for 1982 students is 29½. The median age has been rising since 1976 when it reached a low of 27. For males the median age is about 30 and for females it is about 29. As a group, foreign students are about two years older (31) than U.S. students (29). The rise in the median age in 1982 is due primarily to an increase in the number of students over 40. The median age of students appears to be approaching 1960s levels fairly rapidly.

The proportion of part-time students has risen significantly in the last two years. After dropping to a low of 19% in 1978, the proportion of part-time students began to rise slightly. In 1981 there was a major increase--almost 31% of the students were part-time in that year. In 1982 there was a further increase, and one-third of the students are now enrolled on a part-time basis. Among U.S. students, the proportion of part-time students is almost 35%.

With the exception of health administration, areas of specialization appear to have remained relatively stable over the years. It should be noted, however, that there continue to be serious reporting problems with regard to areas of specialization. Schools define areas differently and frequently combine areas. Nor is the reporting consistent--several schools classified students differently in 1982 than they had in 1981. ASPH will continue to work on a reporting system that is as accurate as possible, given the diversity of training programs in the schools. In the meantime, the data on areas should be viewed with caution.

Health administration continues to attract the greatest number of students, although it appears that the proportion of students in health administration has been declining since the late 1970s. In 1975-76, 32% of the students were in this area--by 1981-82 only about 20-21% of the students were in health administration. In 1982, the schools reported 2,107 students (24%) in health administration. There were several reporting errors noted that could not be corrected,

and the 2,107 figure is too high. However, it does appear that the proportion of health administration students rose in 1982. Whether this is a short-term phenomenon or the beginning of a trend will not be apparent for several years.

Over the years, there have been some differences in areas selected based on sex and race. Women are still overrepresented (in terms of their enrollment) in public health practice, health education and nutrition; and underrepresented in environmental sciences, occupational safety and health, and biomedical and lab sciences. However, women are very slowly increasing their representation in the latter three fields.

American Indian students are represented more in health administration (39% in 1982), education (19%) and "other" areas (14%). Asian students are represented less in health administration (18%) and more in environmental sciences (14%), epidemiology (14%) and biostatistics (9%). Black students are represented more in health administration (34%) and nonspecialized fields (18%). A large proportion of 1982 black students are non-degree students. Hispanic students are represented more in "other" areas (20%), environmental sciences (15%), education (13%) and nutrition (9%). However, if Puerto Rico is excluded, the proportion of Hispanic students in environmental sciences drops to 8% and the proportion in nutrition drops to 3%. Over the years, the proportion of minority students in health administration has generally decreased and their representation in other fields has increased. For minority students, "other" areas generally represent demography and behavioral sciences.

Foreign students are still represented largely in "other" areas (26%), primarily international health, demography and tropical medicine. They are represented less in health administration (13%) than U.S. students and at the same level in epidemiology (13%).

In 1958, 39% of the students had a prior doctorate--almost all of these doctorates (97%) were medical degrees. About 11% of the students had master's degrees and 50% had only a prior bachelor's. In 1958, about one-quarter of the bachelor's degrees (24%) were nursing degrees.

Over the years, the proportion of students with prior doctorates decreased, although the percentage of students with prior master's increased. In 1981, 14% of the students had prior doctorates, 23% prior master's and 62% prior bachelor's. In 1982 there was a slight increase in prior doctorates. While foreign students account for a large number of the doctorates, there has been a slight increase in the number of U.S. students with prior doctorates. Female students still have significantly less prior education than male students. 71% of U.S. female students have only prior bachelor's vs. 55% of the males. Foreign students have more prior education--only 30% have prior bachelor's as their highest degree and about 46% have prior doctorates.

With regard to degree objective, there has been very little change since 1974-75. About 70% of the students pursue master's degrees and about 20% pursue doctorates. Almost 70% of the master's students are pursuing an MPH; 48%, or almost half, of all public health students are in an MPH program. Of the doctorates, the PhD is the most popular, and over half of the doctoral students (11% of total students) are in a PhD program.

TABLE 4

TOTAL ENROLLMENTS
U.S. SCHOOLS OF PUBLIC HEALTH
1974/75 - 1982/83

	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	--	--	--	--	90	129	147	165	126
Boston	--	--	--	--	--	--	--	289	270
Berkeley*	371	396	505	430	415	466	469	464	435
UCLA*	462	493	521	484	528	584	607	539	530
Columbia*	200	291	327	343	399	413	427	431	538
Harvard*	341	381	361	414	473	455	435	403	421
Hawaii*	149	200	268	316	336	350	352	338	312
Illinois*	103	113	139	139	154	144	163	216	287
J. Hopkins*	493	565	551	633	653	735	891	823	856
L. Linda	197	241	269	223	323	258	271	704[2]	722
Mass.*	87	105	86	119	118	167	138	139	135
Mich.*	762	775	683	610	704	657	742	742	645
Minn.*	379	477	460	455	508	509	502	448	374
N. Carolina*	533	501	520	595	660	671	670	600	637
Oklahoma*	184	178	172	186	193	248	232	224	188
Pittsburgh*	454	408	408	459	465	483	454	500	454
Puerto Rico	N/A	221	96	136	136	136	144	142	203
San Diego	--	--	--	--	--	--	--	--	100
S. Carolina	--	--	--	76	117	154	154	175	192
Texas*	325	372	365	414	555	601	603	576	504
Tulane*	301	306	302	338	366	405	344	389	382
Wash.*	264	223	285	242	290	380	404	321	294
Yale*	216	215	297	229	239	270	277	283	291
TOTAL	5,821[1]	6,461	6,615	6,841	7,722	8,215	8,486	8,911	8,896
*Trends for 17 Schools	5,624	5,999 (+7%)	6,250 (+4%)	6,406 (+3%)	7,056 (+10%)	7,538 (+7%)	7,770 (+3%)	7,436 (-4%)	7,283 (-2%)

[1]Puerto Rico not included.
[2]Off-campus students included for first time.

Table 5

Trends in Students Enrollment - Given as % (except age)

	1958-59	1974-75	1976-77	1978-79	1980-81	1981-82	1982-83
No. of Schools	13[1]	18[2]	19	21	21	22	23
Total Enrollment	1,242	5,821	6,615	7,722	8,486	8,911	8,896
Female Students	28.7	45.5	48.3	52.1	54.7	55.4	57.3
Foreign Students	23.5	10.6	9.7	10.0	10.8	15.0	13.5
Minority (U.S.)	--	17.7 (1975)	--	--	18.4	16.4	17.1
Median Age (est.)	33	27.5	27	28	28.5	29	29.5
Part-time	--	23.4	22.9	20.5	22.2	30.8	33.1
in Health Admin.	--	27.2	28.8	25.5	24.3	20.4	24.0
Highest Previous Degree							
Doctorate	39.0	--	--	--	--	13.8	16.2
Master's	11.1					23.4	22.7
Bachelor	49.9					61.9	60.3

[1]Data for 1958-59 from Dr. James Troupin and includes 2 Canadian schools; actual number of U.S. schools in 1958 was 11. Enrollment for 1958-59 represents full-time students only.

[2]Puerto Rico not included; actual number of schools in 1974-75 was 19.

GRADUATES

There were 3,195 graduates from the 23 schools during the period July 1, 1981-June 30, 1982. Table 6 shows trends in graduate degrees since the early 1960s. In 1961-62 there were 715 graduate degrees awarded by the 12 U.S. schools--twenty years later the number of schools has almost doubled and the number of graduates has increased more than fourfold.

Master's degrees account for over 90% of the degrees awarded. The proportion of doctorates rose to 9% during the 1960s and has remained at that level.

The MPH continues to be the most commonly awarded master's degree, accounting for over 70% of the total master's degrees awarded. The MSPH rose from about 2% in 1965-66 and now constitutes about 6-7% of the total master's. All 23 schools offer the MPH, 7 offer the MSPH and 14 offer the MS. Data on the MS degree has only been collected within the past few years, but it has become increasingly popular, and is awarded more frequently than the MSPH. About half of the "other master's" degrees are in health or hospital administration; the MHA or MHSA is offered by five schools. The remaining master's degrees are specialized degrees offered by individual schools.

Over the years, the PhD has supplanted the DrPH as the most commonly awarded doctoral degree. Currently 17 schools offer the DrPH, 16 offer the PhD, 4 offer the ScD and 1 offers the DHSc.

Characteristics of 1981/82 graduates in general parallel those of students--55% are female, 15% are foreign, and 15% of the U.S. graduates are members of minority groups. About 7% of the U.S. female graduates get doctorates vs. 12% of the U.S. males. Of minority graduates, about 6% of black graduates get doctorates, 6% of Asian graduates and 5% of Hispanic graduates. About 11-12%

of the foreign graduates get doctorates. These proportions have remained at about the same level since 1974.

Areas with the highest proportion of doctoral degrees include biomedical/ lab sciences (29% of degrees awarded were doctorates), biostatistics (29%), "other areas" (17%), epidemiology (14%) and environmental sciences (12%). Areas with the highest proportion of prior MD's include public health practice (29% of graduates), epidemiology (28%), "other areas" (27%) and nonspecialized (21%). Of the total graduates, about 23% have prior doctorates and 14% have prior master's.

Table 6

Graduate Degrees - U.S. Schools of Public Health

Year	1961-62[1]	1965-66[1]	1969-70[1]	1974-75	1978-79	1980-81	1981-82
No. of Schools	12	13	16	18[2]	21	20[2]	23
Total Degrees	715	1,079	1,652	2,221	2,848	3,042	3,195
Masters	685	998	1,506	2,031	2,583	2,760	2,889
MPH	513	703	1,028	1,509	1,853	1,939	2,105
as % of Masters	74.9	70.4	68.3	74.3	71.7	70.3	72.8
MSPH	-	20	83	147	158	211	184
as % of Masters	-	2.0	5.5	7.2	6.1	7.6	6.4
MS	-	-	-	-	322	307	326
as % of Masters	-	-	-	-	12.5	11.1	11.3
Other Masters	172[3]	275[3]	395[3]	375[3]	250	303	274
as % of Masters	25.1	27.6	26.2	18.5	9.7	11.0	9.5
Doctorates	30	81	146	190	265	282	306
DrPH	14	32	46	69	84	80	113
as % of Doc.	46.7	39.5	31.5	36.3	31.7	28.4	36.9
ScD	10	23	30	32	43	53	40
as % of Doc.	33.3	28.4	20.5	16.8	16.2	18.8	13.1
PhD	6	26	70	76	125	140	138
as % of Doc.	20.0	32.1	48.0	40.0	47.2	49.6	45.1
DHSc	-	-	-	13	13	9	15
as % of Doc.	-	-	-	6.8	4.9	3.2	4.9

[1]Data for 1960s from Dr. James Troupin and represents U.S. schools only (Canadian schools excluded).

[2]One school did not report.

[3]Includes MS degrees.

EXPENDITURES

All twenty-three schools reported their expenditures. Since this was the first year that one school reported its expenditures, comparisons with last year's data were made on only 22.

UNIVERSITY FUNDS

Salary & Fringe - In all but one school the gross amount of salary and fringe benefits was up over last year; the mean proportion of fringe benefits to total labor expense remained the same--15%. There is no difference between public and private schools.

Total University Funds - There has been a general increase in the amount of total university funds expended. Only two schools (both public) showed a decrease. The range of increase is from 2% to 71% with the mean increase of 36%. (Private schools average 31%; public schools average 23%). University funds as a percent of total expenditures were the same or higher than last year in all but one school. Twelve schools were higher (five private and seven public).

GRANTS AND CONTRACTS

U.S. Government - Twelve schools (four private and eight public) spent more U.S. government funds this year than last. Fourteen schools spent less on training than last year. Twelve schools spent less on student aid.

Foundation, State, Industry - Fourteen (six out of the eight private schools and eight public schools) spent more money in this category. Of the fourteen schools that spent more money, six of these schools spent less U.S. government funds although in only one instance did the increase in this category compensate for the lesser amount of U.S. government funds expended.

Total Grants and Contracts - Thirteen (five private and eight public) spent more in this category; nine schools spent less.

TOTAL EXPENDITURES

Total expenditures were higher for 17 out of 22 schools. (The percent of increase ranged from 1% to 37% with the median increase as 11%. No difference in percent of increase between private and public schools). Five schools spent less in 81-82 than in 80-81. Of these five schools, four spent less in U.S. government funds but more of foundation, state and industry funds.

APPENDICES

AGGREGATE DATA TABLES

ENROLLED STUDENTS FALL TERM, 1982

AREA OF SPECIALIZATION		RACE AND ETHNICITY AND CITIZENSHIP										
		American Indian/ Alaskan Native	Hawaiian	Asian/Pacific Islander	Black	Hispanic	White	Unknown	TOTAL U.S.	Foreign Citizenship	Citizenship Unknown	TOTAL
Biostatistics	Male	2		15	3.5	4	166.5	14	205	39.5	1.5	246
	Female	1		19	6.5	6	220	17	269.5	42.5	1	313
	Unknown											
Epidemiology	Male	1	1	24	18.5	6	298.5	22	371	106	4	481
	Female	2		25.5	19	9	462.5	22	540	48	1	589
	Unknown											
Health Services Administration	Male	13	2	30	52	36.5	517	85	735.5	103	6	844.5
	Female	14		35.5	84.5	42	941.5	89	1206.5	45	11	1262.5
	Unknown											
Public Health Practice Program Management	Male			7	7	6	108	3	131	43		174
	Female	2	2	20	27	12	331	27	421	49.5		470.5
	Unknown											
Health Education	Male	3	1	4	8	9	78.5	6	109.5	24		133.5
	Female	10	1	20	19	38	319.5	18	425.5	30	1.5	457
	Unknown											
Environmental Sciences	Male	4	1	27.5	11	26	451.5	73.5	594.5	85	10	689.5
	Female			24.5	14.5	27.5	291.5	42	400	28	3	431
	Unknown							1	1			1
Occupational Safety & Health	Male			3.5	8	4	154	8.5	178	20.5		198.5
	Female			4.5	.5	3.5	100.5	4	113	2		115
	Unknown											
Nutrition	Male			3	1		46		50	24	1	75
	Female	3		22	13	31	170	26	265	31	2	298
	Unknown											
Biomedical & Lab Sciences	Male			7	3	1	139	1	151	33	5	189
	Female	2		10	5		122		139	16	4	159
	Unknown											
Other	Male	5	1	16	12	24.5	117	23	198.5	218	.5	417
	Female	5	1	11	16	45	243.5	23	344.5	90	7.5	442
	Unknown											
No Specialization	Male	1		10	29	11	146	30	227	52	8	287
	Female			10	42	12	319	65	448	34	14	496
	Unknown											
Unknown	Male	2		6		2	24	5	39	17	3	59
	Female			3	3	3	38	5	52	9	7	68
	Unknown											
TOTAL	Male	31	6	153	153	130	2246	271	2990	765	39	3794
	Female	39	4	205	250	229	3559	338	4624	425	52	5101
	Unknown							1	1			1

Note: Students with dual concentrations are counted as .5 in each area

ENROLLED STUDENTS FALL TERM, 1982

AGE	U.S. CITIZENSHIP			FOREIGN CITIZENSHIP			UNKNOWN CITIZENSHIP			TOTAL		
	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN
Under 25	324	654	36	19	39		2	7		345	700	36
25 - 29	721	1295	125	161	117	17	9	11		891	1423	142
30 - 34	706	859	138	206	94	23	17	13		929	966	161
35 - 39	297	428	81	91	51	6	3	11		391	490	87
40 - 44	130	240	36	58	24	4	4	1		192	265	40
45 - 49	63	121	16	32	18	2	2	2		97	141	18
50 and Over	75	89	18	16	5	3	1	3		92	97	21
Unknown	489	674		150	54		1	4		640	732	
TOTAL	2805	4360	450	733	402	55	39	52		3577	4814	505
Part - Time	1070	1572		163	93		20	30		1253	1695	
Full - Time	1920	3052	1	602	332		19	22		2541	3406	1
TOTAL	2990	4624	1	765	425		39	52		3794	5101	1

ENROLLED STUDENTS, FALL TERM 1982

HIGHEST PREVIOUS DEGREE	U.S. CITIZENSHIP			FOREIGN CITIZENSHIP			UNKNOWN CITIZENSHIP			TOTAL		
	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN
Bachelor or Equiv.	1155	2349		121	101		8	23		1284	2473	
MPH	89	168		32	22		1	2		122	192	
Other Masters	404	567		74	39		6	7		484	613	
MD/MBBS	304	126	1	226	60		8	2		538	188	1
DDS/DMD	31	8		16	9					47	17	
DVM	18	8		4						22	8	
PhD	65	48		12	5		7	4		84	57	
Other Doctorate	17	20		3	4			3		20	27	
Other	16	20		11	4					27	24	
Unknown	891	1310		266	181		9	11		1166	1502	
TOTAL	2990	4624	1	765	425		39	52		3794	5101	1
DEGREE OBJECTIVE												
Masters												
MPH	1302	2442	1	334	211		2	1		1638	2654	1
MS/SM	267	422		24	40		1	4		292	466	
MSPH	216	217		121	39		1			338	256	
Other Master's	259	311		23	9		2	5		284	325	
Doctorate												
DrPH	178	288		50	31		2			230	319	
PhD	398	447		84	39		6	4		488	490	
ScD/DSc	113	109		34	9			4		147	122	
Other Doctorate	10	4		4	1					14	5	
Joint Md/MPH	43	25			1					43	26	
Non Degree	195	347		90	44		25	34		310	425	
Other	8	7		1	1					9	8	
Unknown	1	5								1	5	
TOTAL	2990	4624	1	765	425		39	52		3794	5101	1

DEGREE AWARDED BY AREA OF SPECIALIZATION AND CITIZENSHIP

GRADUATES 1981-1982

AREA OF SPECIALIZATION	MPH *		MS/SM		MSPH		OTHER MASTERS		DrPH		PhD		DSc/ScD		OTHER DOCTORATE		TOTAL	
	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
Biostatistics	31	12.5	39	17	5	1	8		4		26	11	2.5				115.5	41.5
Epidemiology	203	35.5	26.5	5.5	21	1	10		12	2	27	2	4				303.5	46
Health Services Administration	481	38	48.5	6	47	3	158	5	31	6	4	1	4				773.5	59
Public Health Practice Program Management	228.5	58	27	1	8	3	3		15	1			2				283.5	63
Health Education	176.5	14.5	13		4		3	1	6		3	1					205.5	16.5
Environmental Sciences	129.5	19	79	13	30	5	29	1	6		24	6	3				300.5	44
Occupational Safety & Health	54	6	27	1	34	1	8	4	1		7		2.5	1			133.5	13
Nutrition	144.5	25.5	2.5	1	5	1	12		1	4	1		7				173	31.5
Biomedical & Lab Sciences	24	6	8		5	4	16	2	8		13	2	4				78	14
Other	139	83	7.5	3.5	1	4	14		8	7	6	4	8	2	11	4	194.5	107.5
No Specialization	154	40															154	40
Unknown	2				1				1								4	
TOTAL	1767	338	278	48	161	23	261	13	93	20	111	27	37	3	11	4	2719	476

*Includes 17 MD/MPH degrees.

NOTE: Students with dual concentrations are counted as .5 in each area.

DEGREES AWARDED BY SEX, CITIZENSHIP, AND RACE (U.S. Only)
GRADUATES, JULY 1, 1981 - JUNE 30, 1982

	MPH		MS/SM		MSPH		OTHER MASTERS		DrPH		PhD		DSc/ScD		OTHER DOC.		JOINT MD/MPH		TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
U.S. Citizens																				
American Indian/ Alaskan Native	9	15																	9	15
Hawaiian		3																		3
Asian/Pacific Islander	33	39	5	9	5	1	4	6		1	2	1		1	1		1		51	58
Black	32	67	2	4	3	9	3	11	2	2	1	1		2			3	1	46	97
Hispanic	24	37	12	4	2		8	11		3	1		1					1	48	56
White	499	901	91	130	72	60	107	100	35	44	58	34	14	16	6	4	6	3	888	1292
Unknown	40	51	12	9	5	4	4	7	4	2	10	3	2	1			2		79	77
TOTAL U.S.	637	1113	122	156	87	74	126	135	41	52	72	39	17	20	7	4	12	5	1121	1598
Foreign Citizens	214	124	28	20	19	4	10	3	14	6	25	2	2	1	1	3			313	163
TOTAL	851	1237	150	176	106	78	136	138	55	58	97	41	19	21	8	7	12	5	1434	1761

GRADUATES WITH MD DEGREES BY AREA OF SPECIALIZATION, DEGREE RECEIVED & CITIZENSHIP

AREA OF SPECIALIZATION	MPH		MS/SM		MSPH		OTHER MASTERS		DrPH		PhD		DSc/ScD		OTHER DOCTORATE		TOTAL*	
	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN	U.S.	FOREIGN
Biostatistics	5	4		2						1	1						6	7
Epidemiology	51	19	3	3	4	1	1		4	2			3				66	25
Health Services Administration	43	17.5	2	.5	2					2							47	20
Public Health Practice Program Management	31	21		1	1	1											32	23
Health Education		2																2
Environmental Sciences	17	6															17	6
Occupational Safety and Health	1		5	1			1	1						.1			7	3
Nutrition	9	16.5		1						1							9	18.5
Biomedical and Lab Sciences	4	2															4	2
Other	31	52		.5						2							31	54.5
No Specialization	24	16															24	16
Unknown	2	1															2	1
TOTAL	218	157	10	9	7	2	2	1	4	8	1		3	1			245	178

*Total differs from total on Highest Previous Degree table because three schools that did not provide data on highest previous degree provided data on prior MD's.

NOTE: Students with dual concentrations are counted as .5 in each area.

HIGHEST PREVIOUS DEGREE OF GRADUATES
JULY 1, 1981 - JUNE 30, 1982

HIGHEST PREVIOUS DEGREE	U.S.			FOREIGN			CITIZENSHIP UNKNOWN			TOTAL		
	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN
Bachelor or Equiv.	416	833		47	42					463	875	
MPH	20	22		7	4					27	26	
Other Masters	77	129		20	10					97	139	
MD/MBBS	149	63		121	45					270	108	
DDS/DMD	15	4		10	5					25	9	
DVM	6									6		
PhD	22	15		2	2					24	17	
Other Doctorate	17	4		1	2					18	6	
Other		1			2						3	
Unknown	399	527		105	51					504	578	
TOTAL	1121	1598		313	163					1434	1761	

EXPENDITURES OF SCHOOLS OF PUBLIC HEALTH

1981-82

UNIVERSITY FUNDS

School[1]	Salary & Wage	Fringe Benefits	Total Salary & Wage	Student Aid	Non-personnel Expenses	Indirect Expenses	University Total
25	5,898,073	891,125	6,789,198	0	1,394,569	2,098,437	10,282,204
26	5,856,672	1,150,512	7,007,184	1,649,090	3,010,751	2,732,352	14,399,377
27	4,362,544	915,698	5,278,242	270,632	180,432	3,444,423	9,173,729
28	4,125,527	776,543	4,902,070	0	585,082	1,701,017	7,188,169
29	1,353,212	320,046	1,673,258	3,157	206,675	1,811,647	3,694,737
30	1,883,900	310,500[2]	2,194,400	0	232,100	99,000	2,525,500
31	2,510,619	589,719	3,100,338	113,082	361,997	1,044,813	4,620,230
32	3,923,000	721,000	4,644,000	269,000	3,025,000	3,264,000	11,202,000
33	2,546,669	456,153	3,002,822	0	224,749	2,507,620	5,735,191
34	925,379	277,614	1,202,993	0	60,991	364,438	1,628,422
35	1,167,396	159,191	1,326,587	15,285	200,981	692,860	2,235,713
36	883,937	152,068	1,036,005	0	121,278	509,443	1,666,726
37	1,908,134	403,699	2,311,833	11,463	1,368,983	792,478	4,484,757
38	625,514	127,980	753,494	0	54,800	814,578	1,622,872
39	2,421,330	567,307	2,988,637	44,817	337,189	2,263,922	5,634,565
40	1,230,966	246,193	1,477,159	0	130,773	170,103	1,778,035
41	3,907,558	134,476[1]	4,042,034	0	791,383	2,835,766	7,669,183
42	2,427,672	461,258	2,888,930	0	409,098	1,118,031	4,416,059
43	1,247,026	241,326	1,488,352	130,556	372,906	2,511,006	4,502,820
44	1,123,900	164,470	1,288,370	0	177,190[3]	0	1,465,560
45	1,112,666	273,566	1,386,232	0	344,103	206,172	1,936,507
46	631,893	121,258	753,151	0	190,633	879,269	1,823,053
47	200,000	40,000	240,000	0	0	0	240,000

[1]Many of fringe benefits are paid directly by State--not university and they are unable to determine value.

[2]Fringe benefits are paid for at the university level and therefore not budgeted to the School of Public Health.

[3]Includes indirect costs.

EXPENDITURES OF SCHOOLS OF PUBLIC HEALTH

1981-82

GRANTS AND CONTRACTS / TOTAL EXPENDITURES

School	U.S. GOVERNMENT				FOUNDATION, STATE, INDUSTRY, ETC.				Total Grants & Contracts	Misc.	TOTAL EXPENDITURES
	Research Grants	Training Grants	Student Aid	Sub-total	Research Grants	Training Grants	Student Aid	Sub-total			
25	7,950,600	1,822,769	1,445,806	11,219,175	2,217,550	518,622	86,276	2,822,448	14,041,623		24,323,827
26	13,489,227	1,896,150	3,211,343	18,596,720	6,792,232	40,029	426,496	7,258,757	25,855,477		40,254,854
27	3,202,074	1,304,641	738,253	5,244,968	2,341,630	472,330	157,339	2,971,299	8,216,267		17,389,996
28	1,863,207	359,274	713,100	2,935,581	756,363	224,570	39,310	1,020,243	3,955,824		11,143,993
29	1,493,958	615,291	865,780	2,975,029	75,741	79,378	123,842	278,961	3,253,990		6,948,727
30	1,534,400	175,500	206,300	1,916,200	86,100	28,000	0	114,100	2,030,300		4,555,800
31	1,416,816	1,133,400	215,706	2,765,922	609,015	139,300	0	742,315	3,508,237		8,128,467
32	12,384,000[1]	0	1,769,000	14,153,000	6,114,000[1]	0	363,000	6,477,000	20,630,000		31,832,000
33	8,340,074	1,448,337	685,291	10,473,702	579,070	403,901	26,736	1,009,707	11,483,409	447,925[2]	17,422,827
34	1,423,923	1,329,359	393,884	3,147,166	34,780	0	0	34,780	3,181,946		4,810,368
35	853,652	827,315	15,766	1,696,733	242,763	167,836	26,440	437,039	2,133,772		4,369,485
36	106,804	126,484	145,630	378,918	0	3,858	0	3,858	382,776		2,049,502
37	555,847	0	387,030	942,877	131,122	0	29,615	160,737	1,103,614		5,588,371
38	190,364	66,565	106,801	363,730	100,371	0	1,650	102,021	465,751		2,088,623
39	2,192,296	592,625	252,979	3,037,900	1,188,790	342,498	0	1,531,288	4,569,188		10,203,753
40	1,443,260	186,819	171,748	1,801,827	0	0	0	0	1,801,827		3,579,861
41	4,258,713	834,681	171,198	5,264,592	335,486	63,796	30,648	429,930	5,694,522		13,363,705
42	3,995,632	1,310,265	201,037	5,506,934	1,043,056	81,482	34,310	1,158,848	6,665,782		11,081,841
43	4,179,614	414,397	630,420	5,224,431	623,895	0	0	623,895	5,848,326		10,351,146
44	857,700	0	122,325	980,025	0	0	0	28,191[3]	1,008,216		2,473 776
45	647,756	442,106	172,671	1,262,533	51,868	5,258	0	57,126	1,319,659		3,256,166
46	1,708,076	0	138,193	1,846,269	381,417	0	0	381,417	2,227,686		4,050,739
47											240,000

[1]Includes training grants.
[2]Income, Service Centers, etc.
[3]USC Educational Foundation--from funds contributed.